



**Indoor Video Stations
with 2-wire QwikBUS Technology**

Operating Manual
VH40/45 and VFS40/45
(English version)

Legal information

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The information in this document is subject to technical changes.

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1 General information

1.1 How to use the operating manual

This operating manual describes the safe and efficient handling of your STR Indoor Video Station.

It is part of the package contents and must be kept accessible to the user at all times.

Due to technical developments, the illustrations and descriptions in this manual may differ slightly from the actual indoor video station delivered.

We assume no liability for damage caused by non-observance of these operating instructions.

1.2 Symbols used

All safety information in this manual is identified with appropriate symbols. The signal words at the beginning of the safety message express the potential extent of the hazard.



DANGER!

This symbol/word combination indicates an imminently hazardous situation that will result in death or serious injury if not avoided.



WARNING!

This symbol/word combination indicates a potentially hazardous situation that could result in death or serious injury if not avoided.



CAUTION!

This symbol/word combination indicates a potentially hazardous situation that could result in minor injury if not avoided.



IMPORTANT!

This symbol/word combination indicates important information that can help avoid physical or environmental damage.

1.3 Copyright

This manual and all documentation supplied with this unit remain the copyrighted property of STR.

Their use is permissible and desirable only for the purpose of operating the device.

This documentation may not be reproduced or made available to third parties, especially our competitors, without the express permission of STR.

1.4 Warranty

The manufacturer guarantees the product in accordance with the terms and conditions of purchase and delivery. The warranty is void if:

- > damage is caused by improper handling,
- > repairs or modifications are performed by unauthorized personnel,
- > non-STR accessories or replacement parts are used
- > defective components are not repaired immediately in order to limit the extent of the damage and avoid compromising the safety of the equipment (maintenance obligation).

1.5 Applied standards

The following European and national standards were applied in developing and manufacturing the Indoor Video Station:

- > VDE 0860 - Audio, video and similar electronic devices
 - Safety requirements

In assessing the risks posed by the device, the following standards, BGV (accident prevention guidelines issued by the employers' liability insurance associations in Germany), BGR (rules supplementing the BGV) and BGI (additional information regarding the BGV) were applied:

- > VDE 0100
- > VDE 0800
- > VDE 0805
- > Health and safety regulations (VSG)
- > Accident prevention regulations (UVV)

2 Security

2.1 Proper use

The Indoor Video Station with 2-wire QwikBUS Technology is an access control and internal building communication system for everything from single family homes to residential complex, commercial and public buildings.

Any other use is considered improper.

Its intended use includes observance of this manual.

2.2 General hazards

There are general risks involved in dealing with electrically powered devices. Therefore, please observe the legal requirements for health and safety (VSG) as well as any other generally recognized health and safety rules and accident prevention regulations (hereafter referred to as UVV).

Do not make any changes to the Indoor Video Station. The manufacturer is not liable for damage caused by improper modifications.

2.3 Electrical hazards

When installing the device, be sure to note the prescribed values for voltage and amperage (see technical data).

Only qualified electricians may work on the electrical system or the control system.

Unplug the power cord before beginning work.

Regularly inspect the plug and power cord and have them replaced by a qualified electrician if damaged.

2.4 Maintenance and repair work

Maintenance and repair work may only be performed by authorized personnel. These are persons who are authorized on the basis of their education, training or experience to perform the required tasks and to recognize and avoid possible dangers. They must be able to provide proof of knowledge of the relevant safety standards, regulations and accident prevention rules and have read the manual.

3 Structure and function

3.1 Package contents

The Indoor Video Station consists of a video intercom station, with or without a handset depending on the model, as well as the operating manual.

3.2 Structure and function of the Indoor Video Stations

The Indoor Video Station consists of a 4.3-inch TFT screen inside a closed glass front, six touch buttons, a status LED and an additional handset (VH40/45).

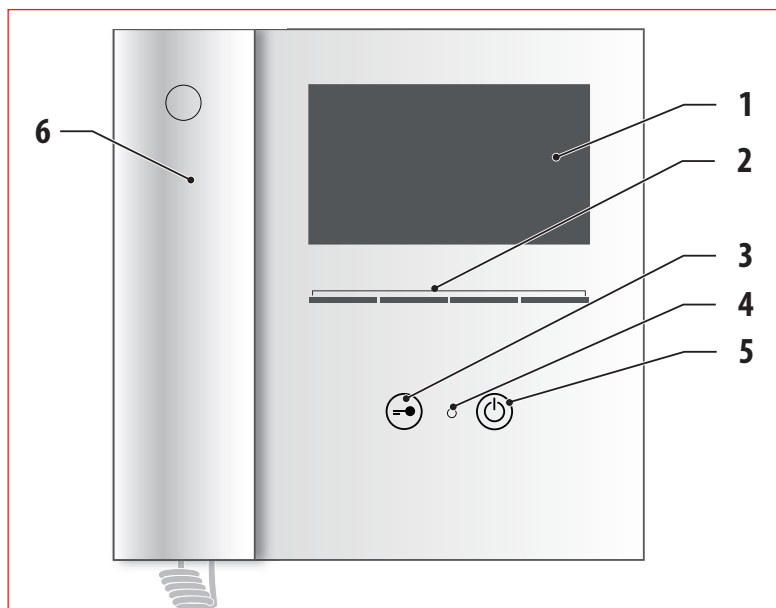


Fig. 1. Structure of the Indoor Video Station (VH40/45 shown)

- 1 4.3" TFT screen for displaying video images
- 2 Touch buttons (multifunctional)
- 3 Door opener touch button
- 4 LED (red) for status indication
- 5 ON - OFF touch button / home button (exits menu functions)
- 6 Handset for discreet communication with the door (VH 40/45 only)

Special Features	VH40	VH45	VFS40	VFS45
Video intercom station	x	x	x	x
Video intercom station with handset	x	x	-	-
Portomat function for building and floor entrance	x	x	x	x
Audio and visual distinction between front door, floor or internal calls	x	x	x	x
Programmable call distinction for up to 7 door stations	x	x	x	x
Choose from 15 different ringtones	x	x	x	x
7 programmable camera memory locations	x	x	x	x
Audio and video privacy setting	x	x	x	x
Internal communication with up to 7 other internal stations	-	x	-	x
Forward incoming calls to other internal stations	-	x	-	x
Start a conversation with the door speakers manually	-	x	-	x

Function

The STR VH40/45 and VFS40/45 Indoor Video Stations can be customized to meet the exact door communication needs of everything from single-family homes to residential complex, commercial and public buildings. They also provide increased safety for facilities such as daycare centers, schools or nursing homes, especially in combination with electronic access control systems.

4 Installation and wiring

4.1 Safety instructions for installation and wiring

The installation and wiring of the STR QwikBUS Indoor Video Station should only be performed by authorized, trained and instructed personnel with the appropriate knowledge.

The general safety requirements for telecommunications equipment (VDE800) must be observed.



DANGER!

Risk of death from electrocution!

Contact with live terminals may lead to serious injury.

Turn off the power supply.

Secure the power supply to prevent it from being turned back on.



IMPORTANT!

Possible damage to property from improper installation!

Voltage from the public power grid supplied to the wrong terminals on the device may damage the electronics.

Do not connect low voltage terminals to the public power grid.



IMPORTANT!

Possible damage to property from improper installation!

Overly stripped wires may result in short circuits and damage to the electronics if a wire strand accidentally comes loose.

Strip cables only to the extent necessary to prevent a short circuit, but not more than 3 cm.

Route the cables properly.

Use cable grips to prevent pulling.



IMPORTANT!

Possible damage to property from electrostatic charging!

Electrostatic charging may cause devices to be destroyed through direct contact with printed circuit boards.

Discharge yourself before touching the device.

**IMPORTANT!**

Possible damage to property from improper cable routing!

High and low voltage lines must be kept separate to avoid interference on the lines.

Surface and concealed wires must be spaced at least 10 cm (4 inches) apart.

In installation channels, a barrier strip separating high and low voltage lines must be used.

4.2 Important information

> The optimal installation height for the Indoor Video Station is about 1.50 m (5 ft).

> Choose a location out of direct sunlight.

> The optimal intercom distance is about 30 cm (12 inches).

4.3 Wiring

Use commercially available communication lines (such as J-Y (St) Y, J-2Y (z) Y) for running the bus lines.

**IMPORTANT!**

Possible damage to property from improper installation!

Induced voltage peaks may cause malfunctions.

The SP333 controller may not be installed in the immediate vicinity of strong magnetic fields (transformers, contactors, etc.).

Maximum cable lengths:

Wire diameter in mm (AWG)	Audio in m (ft)	Video in m (ft)
0.6 (22)	150 (500)	75 (250)
0.8 (20)	300 (1000)	150 (500)
1.0 (18)	450 (1500)	225 (750)

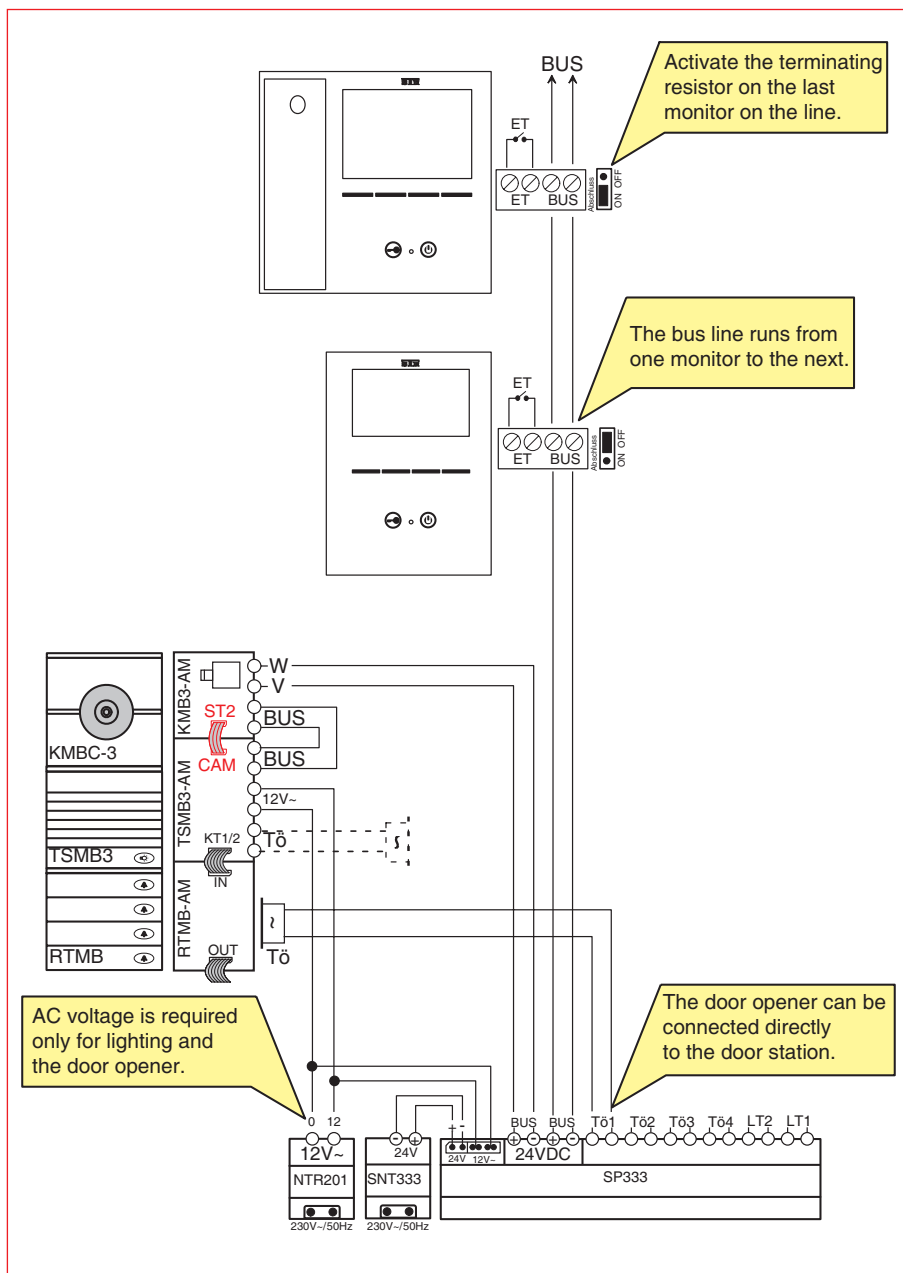


Fig. 2. Wiring the system

4.4 Installation

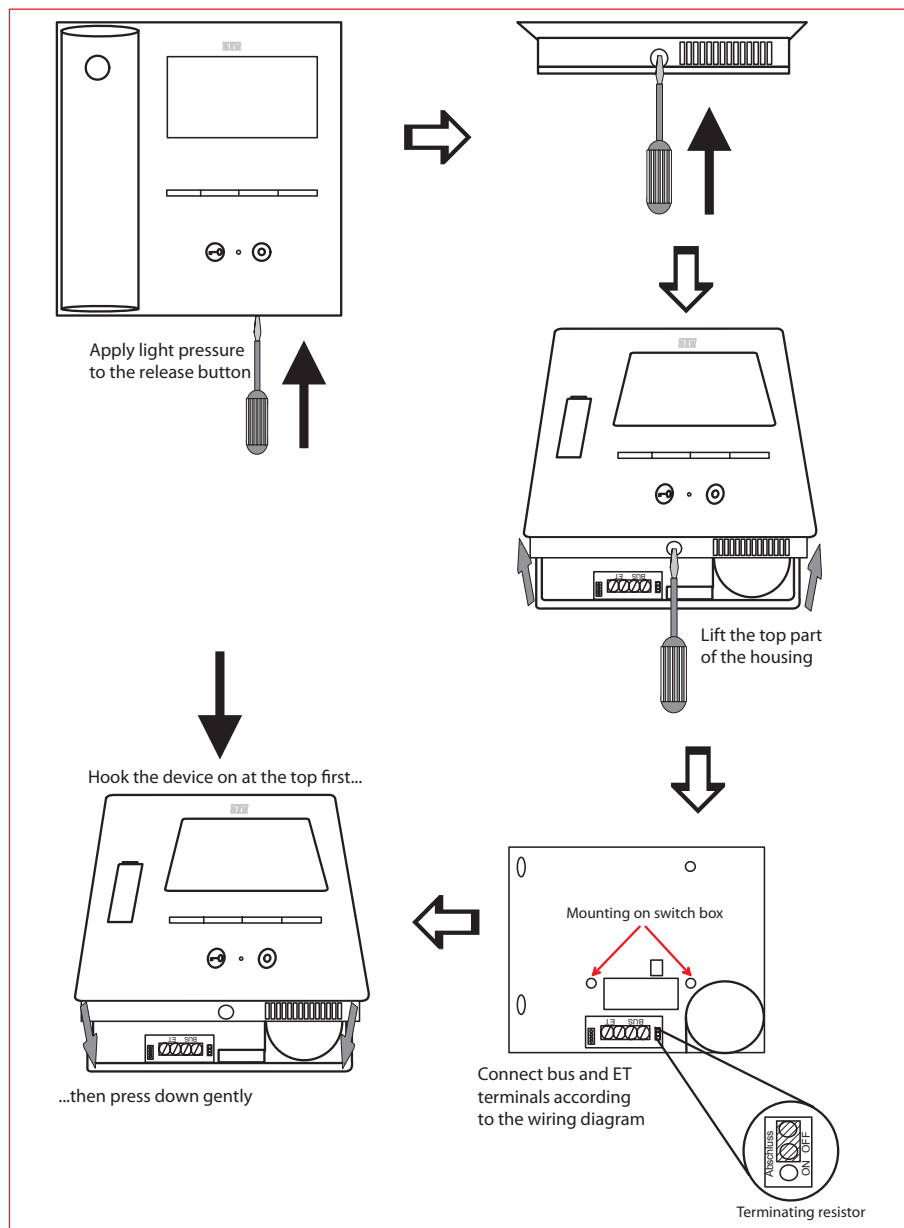


Fig. 3. Installing the VH 40/45

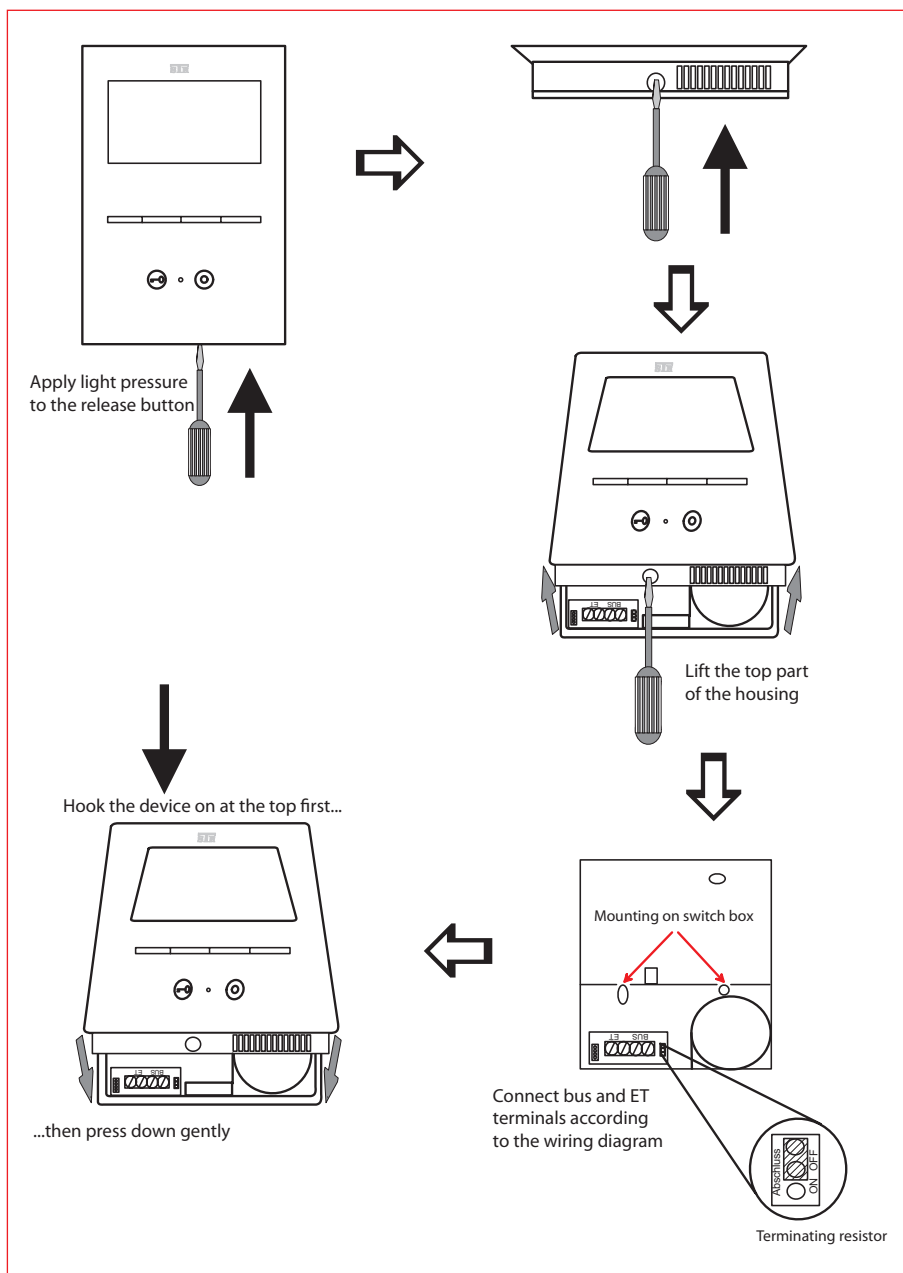


Fig. 4. Installing the VFS 40/45

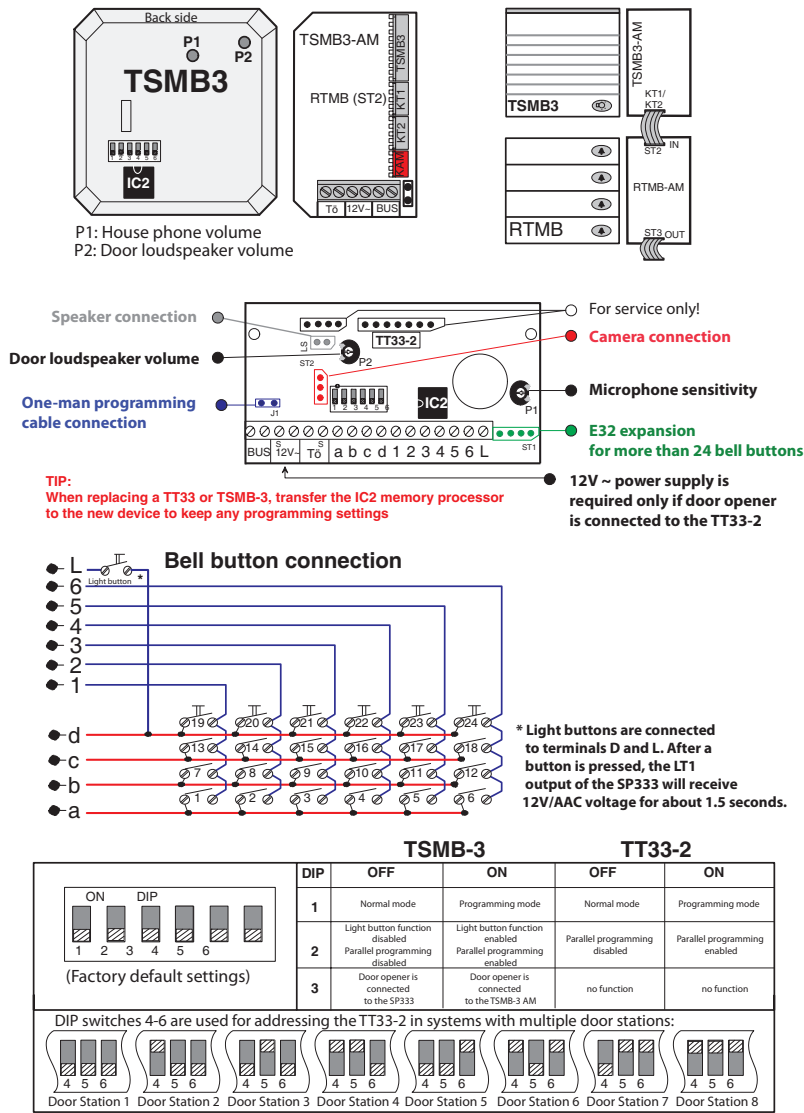


Fig. 5. Wiring the door station

The Indoor Video Station can now be activated and programmed.

5 Activation and programming

5.1 General information

The QwikBUS video system is programmed on the door station **and** the Indoor Video Station. The system may consist of several Indoor Video Stations and up to 8 door stations.

The door station is activated on the door intercom module (TSMB-3) and the intercom amplifier (TT33-2).

Each apartment station (Indoor Video Station) is assigned at least one doorbell button on the door station.

Generally, there are two types of programming: **single programming** (one indoor station is programmed to one doorbell button) and **parallel programming** (up to 4 apartment stations are programmed to a single doorbell button).

The VH45/VFS45 Indoor Video Station also allows the programming of **internal communication** between individual indoor stations.

In addition, the VH40/45 and VFS 40/45 Indoor Video Stations offer a number of **menu customization** options.

5.2 Activation (single programming)

Preprogramming indoor stations (one-man programming)

You can preprogram the indoor stations to the door stations before installing the unit at the customer's location. This saves you time and trips when working with larger systems. A one-man programming cable (EMPK) is required for this purpose.

> Connect the cable to the back of the indoor station (see Fig. 6).



Fig. 6. Connect the programming cable to indoor station

- > Connect the other end of the cable to the door station:
TT33-2: **J1**
TSMB3: **Connection board (TSMB3-AM) -> J1.**
The door station must be connected to a bus controller.
- > Switch the door station to programming mode by setting DIP Switch 1 (Fig. 7) to ON.
The red LED on the Indoor Video Station will flash rapidly (4, Fig. 8) to indicate that the station is in programming mode.

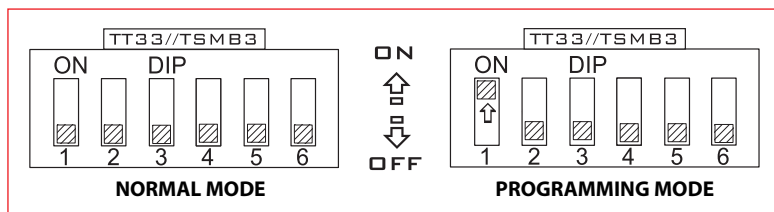


Fig. 7. Switch the door station to programming mode

- > Press the door open button (3, Fig. 8) on the Indoor Video Station.

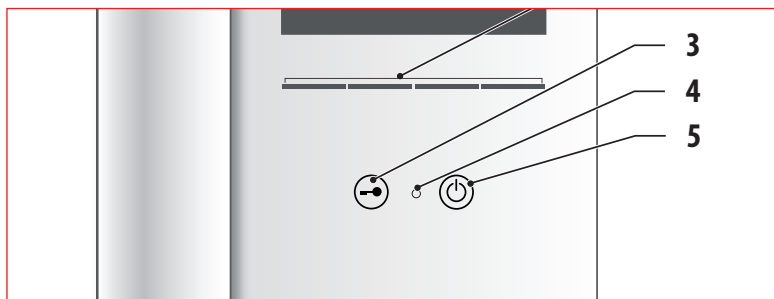


Fig. 8. Press the door open button on the indoor station.

- > When the door station answers, press the doorbell button that you wish to assign to the indoor station.
- > To end preprogramming, set DIP Switch 1 (Fig. 7) to OFF.

Activation with voice connection (recommended if no floor buttons are connected)

- > Switch the door station to programming mode by setting DIP Switch 1 (Fig. 7) to ON.
The red LED on the Indoor Video Station will flash rapidly (4, Fig. 8) to indicate that the station is in programming mode.
All indoor stations are now in programming mode.

- > Press the On/Off button (5, Fig. 8) on the Indoor Video Station or lift the handset (VH40/45 only).
You will hear a single confirmation tone at the door. A voice connection is now established.
- > Now press the doorbell button that you wish to assign to this Indoor Video Station.
The door station will beep 4 times as confirmation.
- > To program additional Indoor Video Stations:
Press the On/Off button (5) on each additional Indoor Video Station. A single tone will be heard at the door. A voice connection is established again.
- > Press the doorbell button that you wish to assign to this Indoor Video Station.
The door station will beep 4 times as confirmation.
- > Switch the door station to normal mode by setting DIP Switch 1 (Fig. 7) to OFF.
Activation is completed.

Activation with floor buttons (recommended if there is no direct access to the apartment)

- > Switch the door station to programming mode by setting DIP Switch 1 (Fig. 7) to ON.
The red LED on the Indoor Video Station will flash rapidly (4, Fig. 8) to indicate that the station is in programming mode.
All indoor stations are now in programming mode.
- > Press the floor button.
You will hear a single confirmation tone at the door.
Inside the apartment, you'll hear a 3-second series of tones as audible confirmation that the indoor station has been "linked" to the door station.
- > Now press the doorbell button that you wish to assign to this Indoor Video Station.
The door station will beep 4 times as confirmation.
- > To program additional Indoor Video Stations:
Press the floor button near each other Indoor Video Station.
You will hear a single confirmation tone at the door. Inside the apartment, you'll hear another 3-second series of tones as audible confirmation that the indoor station has been "linked" to the door station.
- > Press the doorbell button that you wish to assign to this Indoor Video Station.
The door station will beep 4 times as confirmation.

- > Switch the door station to normal mode by setting DIP Switch 1 (Fig. 7) to OFF.

Activation is completed.

5.3 Parallel programming

Up to 4 Indoor Video Stations can be programmed to one doorbell button.

Before you can perform parallel programming, you must first assign a "master indoor station" to one doorbell via the single programming process.

- > Switch the door station to programming mode by setting DIP switches **1 and 2** (Fig. 9) to ON.

The red LED on the Indoor Video Station will flash rapidly (4, Fig. 10) to indicate that the station is in programming mode.

All indoor stations are now in programming mode.

Note:

On the TSMB3, you must **also** press and hold the **light button** before pressing the doorbell button. Once the doorbell button is released, the light button can also be released.

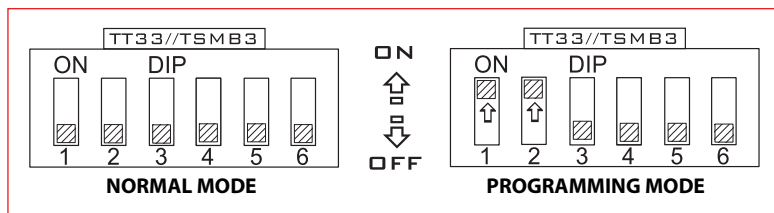


Fig. 9. Switch the door station to parallel programming mode

- > Press the On/Off button (5, Fig. 10) on the Indoor Video Station. You will hear a single confirmation tone at the door. A voice connection is now established.

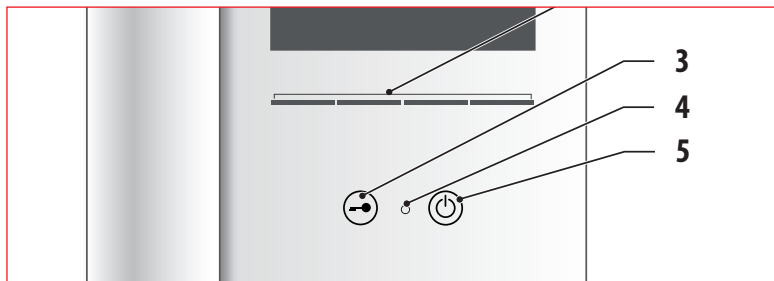


Fig. 10. Press the On/Off button on the indoor station.




- > Now press the next doorbell button that you wish to assign to this Indoor Video Station.
The door station will beep 4 times as confirmation.
- > To program additional Indoor Video Stations:
Press the On/Off button (5) on each additional Indoor Video Station.
You will hear a single confirmation tone at the door. A voice connection is established again.
- > Press the doorbell button that you wish to assign to this Indoor Video Station.
The door station will beep 4 times as confirmation.
- > Switch the door station to normal mode by setting both DIP switches (Fig. 9) to OFF.
Activation is completed.

If several door stations are on the same bus, you must set another door number using DIP switches 4, 5 and 6. There can never be 2 doors with the same door number in the system, otherwise the system will not function properly. Both doors would react to commands from the indoor station. See also figure 5, page 15.

5.4 Programming internal communication (VH/VFS45)

To be able to communicate internally with the other Indoor Video Stations in the system, all indoor stations must be linked to one another.

To do this, follow these steps:

- > Go to Main menu  -> Basic settings -> Internal list.
You'll see 7 available internal stations numbered 1 to 7.
The unit comes with none of the stations preprogrammed.
- > Use the arrow keys  to select the first station and activate the "Program" function by selecting .
- > Within 3 minutes, press the On/Off or door open/light button on the newly assigned indoor unit (5 or 3, Fig. 11).
A message is displayed on the screen of the programmed indoor unit indicating that a new indoor station was added to the Internal List, including the serial number of the unit and programmed station number.
- > Follow the same steps for all other internal users and indoor stations.

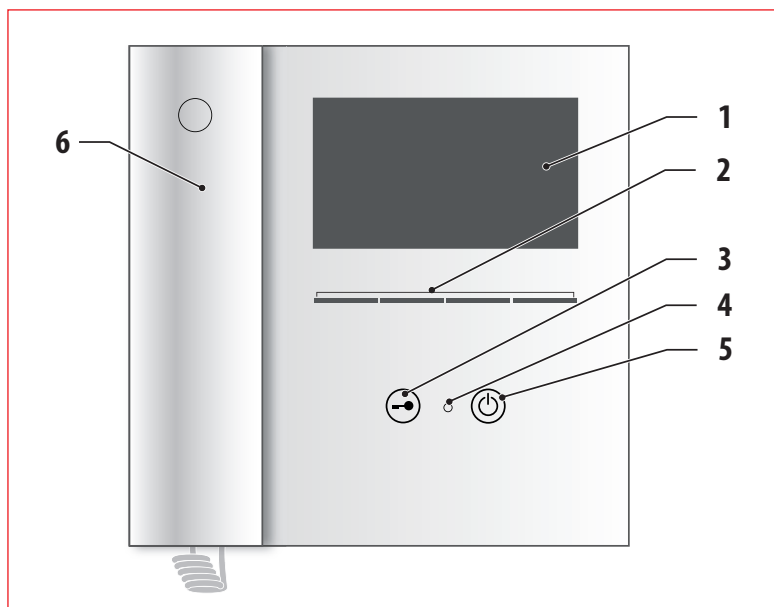


Fig. 11. Indoor station assignment

5.5 Customizing menu functions

You can customize the menu for the Indoor Video Station to your liking.

Access the main menu by pressing the  button.

Here you'll find up to 7* menu levels:

- > Internal call
- > Switch 1
- > Switch 2*
- > Call mute / Call unmute
- > Additional functions*
- > Basic settings
- > System settings

* optionally displayable menu options (see description on the following pages).

Menu level "Internal call"

- > From the main menu, use the arrow keys ▲▼ to navigate to **Internal call** and select this submenu ✓.

If you have set up internal communication (Section 5.4), you'll be able to select the appropriate stations.

- > Exit the submenu via ↵.

Menu level "Switch 1"

- > From the main menu, use the arrow keys ▲▼ to navigate to **Switch 1** and select this submenu ✓.

You'll find two options here: LT1 and LT2.

LT1 is the standard light button on the door station.

LT2 is used to switch on an outdoor light or stairway light. A detailed description can be found in the Universal QwikBUS SP333 Intelligent Controller manual.

- > Exit the submenu via ↵.

Menu level "Switch 2"

The "Switch 2" submenu lets you operate switch outputs on an SM333. This is administered under the menu option "Switch 2 List".

Menu level "Call mute / Call unmute"

- > From the main menu, use the arrow keys ▲▼ to navigate to **Call mute / Call unmute** and select this submenu ✓.
- > Use the ✓ button to confirm the Mute/Unmute function and automatically return to the main menu.
The red LED flashes when the call is disconnected.

Menu level "Basic Settings"

On this menu level, you will find up to 7* sub-levels:

- > Ringer volume
- > Door list / ringtone
- > Internal list (VH/VFS45 only)
- > Switch 1 List
- > Switch 2 List*
- > Function keys
- > Picture

* hideable menu option

- > From the menu, use the arrow keys ▲▼ to navigate to the desired option and select it ✓.

Ringer volume

- > Go to Main menu -> Basic settings -> **Ringer volume**
- > Use the arrow keys ◀▶ to select the desired volume and confirm via ✓.
- > Exit the menu via X.

Door list / ringtone

- > Go to Main menu -> Basic settings -> **Door list / Ringtone**


On this menu level, for up to 7 doors, you can:

- > rename the door
- > assign an address:








From the **Address** menu option, select the door station you wish to assign to the corresponding memory location.

When you select a door station, the current picture from the station is always shown. When the indoor unit is turned on, the current picture of the door station appears under Memory Location 1.

When someone rings the door, the picture from the door that was rung will be shown.

- > select a ringtone and,
- > show or hide the camera at this door on the start screen (Door 2 to 7):
When you turn on the monitor, you can use the  to access the cameras in the system. If there are several cameras in the system, it may be useful to hide unused memory locations to make it easier to switch between cameras.

Follow these steps:

- > Use the arrow keys   to select the desired door and confirm via .
- > Follow the same procedure (  and ) for each submenu (rename, address, ringtone and activation).
- > Exit the menu via .







Internal list

- > Go to Main menu -> Basic settings -> **Internal list**

On this menu level, for up to 7 indoor stations, you can:

- > rename the station,
- > program internal communication,
- > delete a station from the internal list.

Follow these steps:

- > Use the arrow keys   to select the desired memory location and confirm via .
- > Follow the same procedure (  and ) for each submenu (rename, address, ringtone and activation).

For more information on how to program internal communication, see Section 5.4.

- > Exit the menu via .

Switch 1 List

- > Go to Main menu -> Basic settings -> **Switch 1**

On this menu level, for up to 6 memory locations, you can:

- > rename the switch,
- > enable or disable the function.

The memory locations are named LT1, LT2, and TÖ1 through 4.
Switches that are in use can be customized.
Unused switches can be hidden.

- > Use the arrow keys ▲▼ to select the desired memory location and confirm via ✓.
- > Exit the menu via ⏮.

Switch 2 List

- > From the main menu, use the arrow keys ▲▼ to navigate to **Switch 2** and select this submenu ✓.

This menu option lets you rename or enable/disable the relay.

The unit comes with only one preset relay; relays 2-7 are hidden and can be displayed as needed.

- > Exit the submenu via ⏮.

Function keys

On this menu level, you can assign switching functions to the **F1** and **F2** function keys. One useful option, for example, is the mute function. On the VFS/VH 45, the function keys can be customized for each internal user. All switching functions provided by SP333 (Switch1) or additional SM333 (Switch2) can also be assigned to these function keys for instant access to frequently used functions.

- > Go to Main menu -> Basic settings -> **Function keys**
- > Use the arrow keys ▲▼ to select the desired function key and confirm via ✓.
- > Scroll with the arrow keys ▲▼ through the stored list and select a function.
- > Confirm your selection via ✓.
This function is now assigned to the corresponding function key.
If no function is assigned, "Free" will be displayed on the screen.
- > Exit the menu via ⏮.

Picture

- > Go to Main menu -> Basic settings -> **Picture** and confirm via ✓.
- > Select brightness, contrast and color ▲▼ and confirm your selection via ✓.
The selected setting appears as a bar at the top left of the screen.
- > Set the desired value ◀▶ and confirm via ✓.
- > Exit the menu via ⏮.

Menu level "System settings"

On this menu level, you'll find 6* sub-levels:

- > Language
 - > Menu color
 - > Customize menu
 - > Factory settings
 - > Service
 - > Device information
-
- > From the menu, use the arrow keys ▲▼ to navigate to the desired option and select it ✓.

Language

- > Go to Main menu -> System settings -> **Language** and confirm via ✓.
- > Use the arrow keys ▲▼ to select the desired language and confirm via ✓.
There are several languages to choose from.
- > Exit the menu via ⏮.

Menu color

- > Go to Main Menu -> System settings -> **Menu color** and confirm via ✓.
- > Use the arrow keys ◀▶ to select the desired screen text color and confirm via ✓.
- > Exit the menu via X.

Customize menu

On this menu level, you'll find 5* sub-levels:

- > Floor door opener
- > Portomat
- > Call forwarding (VH/VFS45 only)
- > Start conversation (VH/VFS45 only)
- > Switch 2

> From the menu, use the arrow keys ▲▼ to navigate to the desired option and select it ✓.

> Floor door opener

This feature does not come pre-enabled.

To enable it:

- > Go to Main menu -> System settings -> Customize menu -> **Floor door opener** and confirm via ✓.
- > "Floor door opener visible" appears on the screen. Confirm with ✓.
You will automatically return to the "Customize menu" level.
- > Go to Main menu -> **Additional functions** and then use the arrow keys ▲▼ to select Floor Door Opener and confirm your selection via ✓.
- > Assign a relay to Floor Door Opener by selecting the relay with the arrow keys ▲▼ and confirming with ✓.
All Switch1 and Switch2 relays are available.

Note:

If the floor Portomat function is now also enabled, it will switch on the relay that was assigned to Floor Door Opener.

If no relay is assigned to **Floor Door Opener** and you try to enable the floor Portomat function, a pop-up with the message "No Floor Door Opener selected" will appear.

- > Exit the menu via ↵.

> **Portomat**

The station has the option of activating a portomat function. This is used to automatically open the building or floor door whenever the bell is rung (such as in medical offices, office buildings, etc.). To activate this function, follow these steps:

- > Go to Main menu -> System settings -> Customize menu -> **Portomat** and confirm via ✓.
- > "Portomat visible" appears on the screen. Confirm via ✓.
You will automatically return to the "Customize menu" level.
- > Go to Main menu -> **Additional functions** and confirm via ✓.
- > Select **Main door Portomat** or **Floor Portomat** and confirm via ✓.
- > Enable or disable **Main door Portomat** via the ✓ button.
Once enabled, the door opener will be triggered after 3 seconds.
- > Enable or disable **Floor Portomat** also via the ✓ button.
If floor portomat is enabled, if the indoor station rings, the floor button can be used to enable any of the available switch outputs. The switch output can be used to control the corresponding door opener.
Assign the relay function to the corresponding switch output.
You can select any switch output you like. Choose from any of the switch options available under the "Switch 1" and "Switch 2" menus.
These may need to be configured first.

Note:

To enable the **Floor Portomat** function, you must first select a relay.

- > Exit the menu via ↵.

> **Call forwarding**



The **VH45/VFS45** unit gives you the option of forwarding incoming door calls to another internal unit.

- > Go to Main menu -> System settings -> Customize menu -> **Call forwarding** and confirm via ✓.
- > "Call forwarding visible" appears on the screen. Confirm via ✓.
You will automatically return to the "Customize menu" level.
- > Go to Main menu -> **Additional functions** and confirm via ✓.
- > Select **Call forwarding** and confirm via ✓.
- > Enable or disable call forwarding:
Forwarding enabled = ✓.
Forwarding disabled = (X)

If forwarding is enabled, the  symbol will appear in the upper left corner of the screen.

- > To select the internal station where you wish to forward the call, use ▲▼ to select the **Station** menu option and confirm via ✓.
- > Now use ▲▼ to select the corresponding internal station and confirm via ✓.
- > To adjust the call forwarding delay, use ▲▼ to select the **Delay** menu option and confirm via ✓.
This setting determines the amount of time after which the call will be forwarded to the alternate internal station.
- > Use ▲▼ to select the desired amount of time and confirm via ✓.
- > Exit the menu via ↵.

> **Start conversation (VH/VFS45 only)**

- > Go to Main menu -> System settings -> Customize menu -> **Start door conversation** and confirm via ✓.
- > "Start door conversation visible/hidden" appears on the screen. Confirm via ✓.
You will automatically return to the "Customize menu" level.
- > On the Start screen, tap  to start a conversation with the door.
The list of cameras appears.
- > Select any camera in the system and press the touch button under .
You have now started a door conversation.
- > Exit the menu via ↵.

> **Switch 2**

> Go to Main menu -> System settings -> Customize menu -> **Switch 2** and confirm via ✓.

> "Switch 2 visible/hidden" appears on the screen. Confirm via ✓.
You will automatically return to the "Customize menu" level.

> Exit the menu via ↵.

The Switch 2 menu option now appears in the main menu.

Use this menu option to activate any additional programmed relays (SM333). By default, only Relay 1 is displayed.

Factory settings

> Go to Main Menu -> System settings -> **Factory settings** and confirm via ✓.

A warning will appear: Restore factory settings?

Note:

If you confirm this warning by selecting "Yes", any settings you have configured or programmed will be lost!

> Select Yes = ✓ or No = (X).

You are then automatically taken back to the "System settings" menu.

Service

> Go to Main Menu -> System settings -> **Service** and confirm via ✓.

The menu options:

BUS Scanner, Key Signal and Operating Voltage are shown.

These options are used for conducting internal diagnostics. If there are problems with the system, they will help STR Elektronik troubleshoot the issue.

> Exit the menu via ↵.

Device information

> Go to Main Menu -> System settings -> **Device information** and confirm via ✓.

Here you will find information about the manufacturer, device type, version, etc.

5.6 Programming additional modules

If a **switch module (SM333)** is connected to the indoor video stations, follow the programming instructions in the SM333 manual. This is necessary because the switch module "starts" the programming process.

6 Errors

6.1 Troubleshooting safety

Only specially trained experts should work on and troubleshoot the QwikBUS system. The EMERGENCY STOP button must be switched off and secured against reactivation for the duration of the work.

A diagnosis with the power on must have been carried out beforehand.

Errors must be reported immediately upon detection. Defects are to be repaired immediately in order to limit the extent of the damage and avoid compromising the safety of the equipment. Failure to comply will void the warranty.

6.2 Error causes and troubleshooting

The manufacturer's technical staff can assist you with troubleshooting. For more extensive repairs, call the following telephone number:

STR Elektronik Phone: +49 2762 / 9316-0

The following tables provide an overview of the most common problems and how to solve them:

Error	Cause	Solution
Indoor station does not ring	Door station not programmed	Perform or repeat programming
	Speaker defective	Test: Press the floor call button (with the power on) Replace speaker/device
	Indoor station muted (LED flashes slowly)	Turn the sound back on

Error	Cause	Solution
Indoor station rings and immediately turns off	Too little electricity (18 VDC to 26 VDC required for operation), voltage breakdown	Increase the voltage on the SNT333
	Wiring problem or defective device in the system that is impacting the bus voltage	Check the open circuit voltage of the SP333; check wiring and replace if necessary

Error	Cause	Solution
Bad picture	Terminating resistor is not set on the last monitor (on the line)	Set terminating resistor
	Set terminating resistor on all monitors	Set terminating resistor only on the last monitor, remove all others
	Video level is too low	Adjust camera potentiometer

Error	Cause	Solution
Voice audible only in one direction	Loud background noise	Use PUSH to TALK to check whether voice is audible in both directions
	Voltage too low, bus commands are no longer recognized	Check voltage, increase the voltage on SNT333

7 Removal and disposal

7.1 Removal safety

**DANGER!****Risk of death from electrocution!****Contact with live terminals may lead to serious injury.****Turn off the power supply.****Secure the power supply to prevent it from being turned back on.**

7.2 Removal

A QwikBUS system that is no longer functioning must be removed and disposed of in an environmentally friendly manner.

- > Turn off the power supply and secure it against reactivation via the EMERGENCY STOP button.
- > Remove all components of the Indoor Video Station.
- > Turn the power back on.

7.3 Disposal

Unless a return or disposal agreement is in place, dispose of the disassembled components in a reusable manner:

- > Scrap metals
- > Recycle plastic items.

8 Technical information

8.1 VH40/45 and VFS40/45 Indoor Video Stations

Indoor Video Stations	Unit	VH40	VH45	VFS40	VFS45
General Information					
Current consumption (with 24 V power supply)					
Standby (approx.)	mA			6	
Operation (approx.)	mA			300	
Weight (approx.)	g (lbs)	600 (1.32)		420 (0.93)	
Optimal installation height	cm (ft)		150 (5)		
Optimal intercom speaking distance	cm (inches)		30 (12)		
Dimensions					
Height	mm (inches)		180 (7.09)		
Width	mm (inches)	180 (7.09)	180 (7.09)	130 (5.12)	130 (5.12)
Depth	mm (inches)		24 (0.95)		
Monitor					
Type				TFT	
Diagonal	Inches			4.3	
	cm			10.9	
Resolution	Pixels			480 x 272	

9 Appendix

9.1 Accessories

Universal QwikBUS SP333 Intelligent Controller

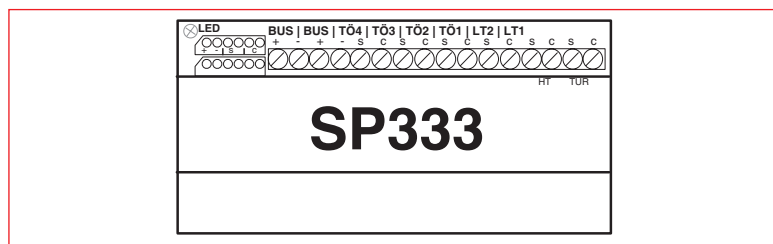


Fig. 12. SP333 Intelligent Controller

The Universal QwikBUS SP333 Intelligent Controller manages bus data and provides outputs for door openers and lighted buttons.

The **SNT333s Switching Power Supply** and **NTR201 Transformer** provide 24 V DC and 12 V AC via a power cord with a 6-pole system connector.

The SNT333 must be mounted in direct proximity to the two power supply units on a DIN EN 60715 rail in the sub-distribution.

The installation width is 107 mm / 6 HP.

Door opener outputs TÖ1 - TÖ4 are assigned to the door stations via DIP switches and can be triggered from the indoor stations by pressing the door open button.

The LT1 output is triggered by pressing the light button on the door intercom amplifier.

The LT2 output can be triggered from the indoor station via the Switch1 menu; no further programming is required.

The output voltage for all outputs (TÖ and LT) is 12 V AC 1 A for approximately 1.5 seconds.

The tripping time for TÖ1 - TÖ4 varies (see separate instructions).

SNT333 Switching Power Supply

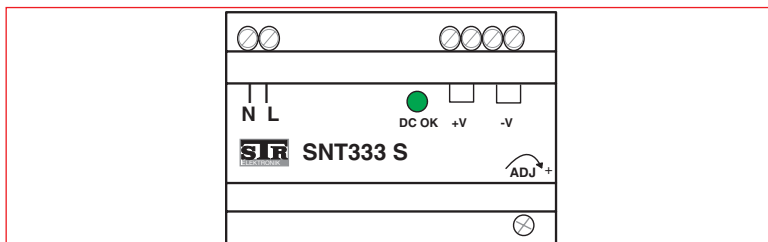


Fig. 13. SNT333 Switching Power Supply

The SNT333 switching power supply provides DC power to the STR Qwik-BUS video system.

It is mounted on a DIN EN 60715 rail in the sub-distribution. The installation width is 77 mm/5 HP.

Technical information:

Primary voltage: 100 - 240 V AC / 50 Hz

Secondary voltage: 24 V DC / 1.5 A (with "ADJ" potentiometer adjustable from 22 to 26 V)

NTR201 Transformer

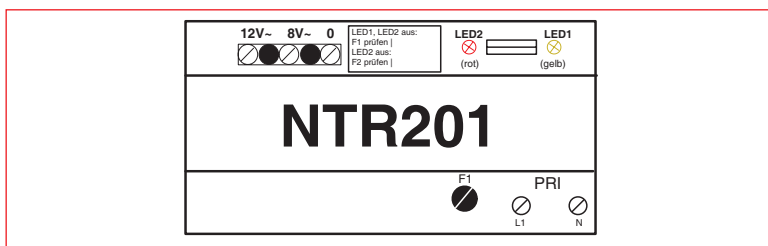


Fig. 14. NTR201 Transformer

The NTR201 Transformer is used to supply power to the door openers and lighting in the STR QwikBUS video system.

It is mounted on a DIN EN 60715 rail in the sub-distribution.

Technical information:

Primary voltage: 230 V AC / 50 Hz

Secondary voltage: 1 x 12 V AC / 1.6 A; 1 x 8 V AC / 1.6 A

Mounting width: 107 mm / 6 HP

Fuse F1 (primary): T80 mA

Fuse F2 (secondary): T630 mA

EV333 Floor Distribution Bus

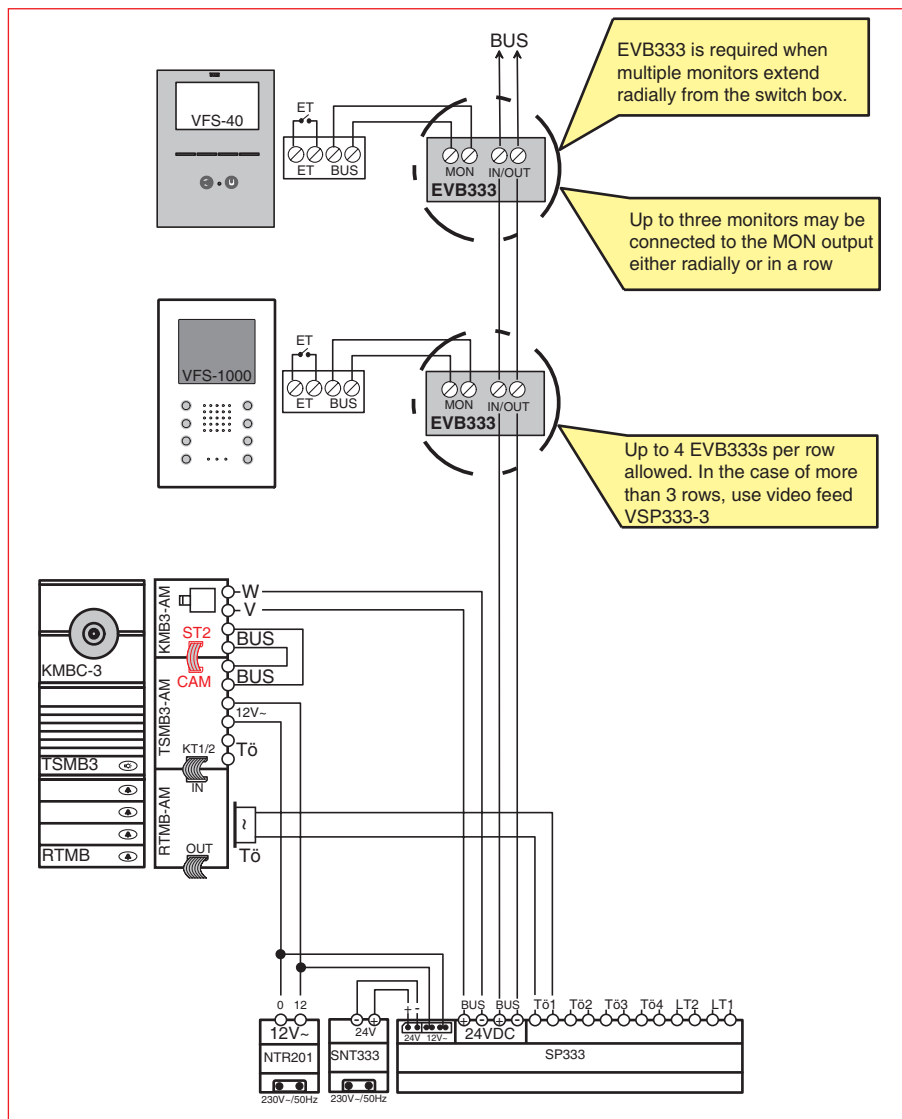


Fig. 15. EVB333 Floor Distribution Bus wiring

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